REMARKS/ARGUMENTS

Claims 1-5, 21, and 23 are rejected under 35 USC 102e as being anticipated by Joch et al. (US 7,227,901).

Claim 1 is amended to include all the limitations of original claim 3, which applicant believes should have been found allowable in view of the cited references. Claim 3 is correspondingly canceled. No new matter is entered.

Concerning the rejection of original claim 3 (now pending claim 1), the applicant asserts that Joch et al. do not teach each and every limitation claimed by the present invention. In particular, the applicant asserts that Joch et al. at least do not teach or suggest the following feature:

> "wherein according to the block coding types of the adjacent blocks in the video stream, the filtering range is determined to be up to eight pixels around the block boundary." (claim 1 – emphasis added)

In the Office action of 01/31/2008, in the rejection of claim 3, the Examiner stated, "Joch further discloses wherein according to the block ending types of the adjacent blocks in the video stream, the filtering range is determined to be up to eight pixels around the block boundary (47 of fig. 3a)". However, the applicant respectfully disagrees. In particular, Fig. 3a of Joch et al. shows that block boundary 47, which is clearly not equivalent or similar to "the filtering range is determined to be up to eight pixels around the block boundary", as is claimed in claim 1 of the present invention. Furthermore, Fig. 3a shows two adjacent blocks 25 being on opposite sides of the block boundary 47. Applicant notes that each block 25 contains 16 pixels (i.e., 4 q0 pixels + 4 q1 pixels + 4 q2 pixels + 4 q3 pixels, for example). There is simply no indication, teaching, or suggestion by Joch that only up to eight pixels around the block boundary are filtered.

Because Joch et al. at least do not teach claimed feature of the present invention that "the filtering range is determined to be up to eight pixels around the block boundary", the

applicant asserts that currently amended claim 1 should be found allowable with respect to the cited reference of Joch et al. Claims 2, and 4-23 are dependent upon claim 1 and should therefore be allowable for at least the same reason as the base claim 1. Reconsideration of claims 1-2 and 4-23 is respectively requested.

Claim 6 is rejected under 35 USC 103a as being unpatentable over joch et al. (US 7,227,901) in view of Ameres et al.(US 7,027,654).

As previously mentioned, claim 6 is dependent upon claim 1 and should therefore be allowable for at least the same reason as the base claim 1. Reconsideration of claim 6 is respectively requested.

Claim 22 is rejected under 35 USC 103a as being unpatentable over Joch et al. (US 7,227,901) in view of Hsu et al. (US 2005/0013497).

As previously mentioned, claim 22 is dependent upon claim 1 and should therefore be allowable for at least the same reason as the base claim 1. Reconsideration of claim 22 is respectively requested.

Claims 24-27 are rejected under 35 USC 103a as being unpatentable over Joch et al. (US 7,227,901) in view of Hsu et al. (US 2005/0013497) and Kondo et al. (US 6,748,113), and further in view of Matthews et al. (US 6,459,731).

Similar to the above remarks for claim 1, claim 24 is amended to include all the limitations of original claim 25, which applicant believes should have been found allowable in view of the cited references. Claim 25 is correspondingly canceled, and the dependency on claim 26 is amended to become dependent upon base claim 24. No new matter is entered.

Concerning the rejection of original claim 25 (now pending claim 24), the applicant asserts that Joch et al. do not teach each and every limitation claimed by the present invention. In particular, the applicant asserts that Joch et al. at least do not teach or suggest the following feature:

"wherein according to the block coding types of the adjacent blocks in the video stream, the de-blocking filtering unit determines the filtering range to be up to eight pixels around the block boundary." (claim 24 – emphasis added)

In the Office action of 01/31/2008, in the rejection of claim 25, the Examiner stated, "wherein according to the block ending types of the adjacent blocks in the video stream, the filtering range is determined to be up to eight pixels around the block boundary (47 of fig. 3a)". However, the applicant respectfully disagrees. In particular, Fig. 3a of Joch et al. shows that block boundary 47, which is clearly not equivalent or similar to "the filtering range is determined to be up to eight pixels around the block boundary", as is claimed in claim 1 of the present invention. Furthermore, Fig. 3a shows two adjacent blocks 25 being on opposite sides of the block boundary 47. Applicant notes that each block 25 contains 16 pixels (i.e., 4 q0 pixels + 4 q1 pixels + 4 q2 pixels + 4 q3 pixels, for example). There is simply no indication by Joch that only up to eight pixels around the block boundary are filtered.

Because Joch et al. at least do not teach claimed feature of the present invention that "the de-blocking filtering unit determines the filtering range to be up to eight pixels around the block boundary", the applicant asserts that currently amended claim 24 should be found allowable with respect to the cited reference of Joch et al. Claims 26-40 are dependent upon claim 24 and should therefore be allowable for at least the same reason as the base claim 24. Reconsideration of claims 24 and 26-40 is respectively requested.

Claim 28 is rejected under 35 USC 103a as being unpatentable over Joch et al. (US 7,227,901) Hsu et al. (US 2005/0013497), Kondo et al. (US 6,748,113), and further in view of Matthews et al. (US 6,459,731) as applied to claims 24 and 27, and further in view of Ameres et al. (US 7,027,654).

As previously mentioned, claim 28 is dependent upon claim 24 and should therefore be allowable for at least the same reason as the base claim 24. Reconsideration of claim 28 is respectively requested.

New Claims 41 and 42

Applicant has added two new independent claims 41 and 42, which are equivalent to original claims 4 and 26 being written in independent form. No new matter is entered.

Concerning the rejections of original claims 4 and 26 in the Office action of 01/31/2008, the Examiner stated, "Joch further discloses wherein determining the filtering range according to the block coding types of the adjacent blocks in the video stream further comprises: if at least one of the adjacent blocks is an intra-coded block, determining the filtering range to be up to four pixels around the block boundary (124 and 126 of fig. 5); and if none of the adjacent blocks are intra-coded blocks, determining the filtering range to be up to eight pixels around the block boundary (12, 124, 126 of fig. 5)."

However, the applicant respectfully disagrees. In particular, regarding the method shown in Fig. 5, Joch et al. illustrate that when it is determined that there is intra-coded macroblock edge in step 120, the method proceeds to steps 124 and 125. When the 3-tap filter is applied in either steps 128 or 132, the filtering range includes P0, which includes 4 pixels. For example, col. 18, lines 20-22 state "Otherwise, if the above condition does not hold, then filter only P0 using the 3-tap filter (128)" (emphasis added); and lines 58-60 state "Otherwise, if the above condition does not hold, then only P0 is filtered with the 3-tap filter (132)" (emphasis added). Applicant notes that P0 refers to Fig. 3a, of which there are only 4 pixels labeled P0. Alternatively, when the 5-tap filter is applied in either steps 130 or 134, the filtering range includes P0, P1, and P2 (in the case of luminance filtering), which includes up to 12 pixels. For example, col. 18, lines 14-19 and lines 34-39 show the formulas.

In this way, applicant asserts that the teachings of Joch et al. do not correspond to that claimed by the present invention that "if at least one of the adjacent blocks is an intra-coded block, determining the filtering range to be up to four pixels around the block boundary." In particular, Joch et al. teach a filtering range of much more than just four pixels in many cases for the 5-tap filter of steps 130 and 134 for intra-coded blocks. For at least this reason, applicant asserts that new claims 41 and 42 should be found allowable with respect to the

cited references. Consideration of claims 41 and 42 is respectfully requested.

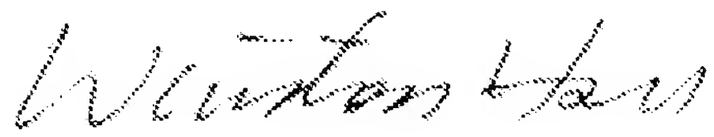
Allowable Subject Matter – Claims 7-20, and 29-39 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The applicant thanks the Examiner for the indication of the allowable subject matter.

Conclusion:

Thus, all pending claims are submitted to be in condition for allowance with respect to the cited art for at least the reasons presented above. The Examiner is encouraged to telephone the undersigned if there are informalities that can be resolved in a phone conversation, or if the Examiner has any ideas or suggestions for further advancing the prosecution of this case.

Sincerely yours,



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